

ABSTRACT OF THE DISCLOSURE

A system and methods provide handling of variable rate playback in a multimedia computer architecture. The systems and methods provide data structures and interfaces that enable a computer architecture and components therein with the ability to playback data at speeds faster and slower than real-time, to playback data in reverse, and to change the rate of playback at any point during playback. One embodiment is a method for providing low-latency, glitch-free changes in a multimedia architecture. Other embodiments are directed to defining multimedia component responsibilities for making rate changes, allowing rate changes to work with standard playback types, coder-decoders, and renderers. The methods include determining a minimum of the maximum reported playback rates and determining minimum and maximum playback rates in a set of modes including: reverse skip mode, reverse key frame mode, reverse full mode, forward full mode, forward key frame mode, and forward skip mode.